What is claimed is:

1. A method for automatically determining a correction period of time (ΔVLZ_opt) for correcting an actual lead time for delivery of an upstream product (V) which is manufactured with an actual lead time (VLZ_actual) by a delivery unit (20.d1) of a manufacturing network (10),
the quantity of the upstream product (V) to be completed in each case by the delivery unit (20.dl) to cover the demand of an end user (30) of the manufacturing network (10) being determined for multiple points in time and stored in the form of a setpoint delivery curve (110, 200),
wherein
– for multiple points in time, the quantity of upstream product (V) completed by the delivery unit (20.d1) but not yet used by a downstream delivery unit (20.e) is determined and stored in the form of an inventory curve (100)
– and the correction period of time (ΔVLZ_opt) is determined by a selection from a quantity of possible periods of time (ΔVLZ),
– for each possible period of time a simulated inventory curve (130, 140, 150, 160) is calculated for each possible period of time using the setpoint delivery curve (110) and the inventory curve (100),
the simulated inventory curve indicating for multiple points in time
the quantity of upstream product (V) that would have been completed by the delivery unit (20.d1) at the particular point in time and not yet used by a downstream delivery unit (20.e), if the lead time required by the delivery unit (20.d1) for the upstream product (V) had been altered by the possible period of time in comparison with the actual lead time (VLZ_actual),
– and the period of time of the possible periods of time resulting in a simulated inventory curve that is optimal with respect to an optimization criterion (σ) based on the simulated inventory curves (130, 130.1, 140, 150, 160) is selected as the correction period of time (ΔVLZ_opt).

2. The method as recited in Claim 1,
wherein
– an actual lead time (VLZ_actual) for the upstream product (V) is determined,

– and a setpoint lead time (VLZ_opt) for the upstream product (V) is determined as the sum of the actual lead time (VLZ_actual) and the correction period of time (ΔVLZ_opt).

3. The method as recited in Claim 1 or Claim 2,
wherein the optimization criterion is minimizing the scattering in the simulation inventory curves (130).

4. The method as recited in one of Claims 1 through 3,
wherein in determining the completed but not yet used quantities of the upstream product (V), the inventories of the upstream product (V) in an output buffer (70.d1) of the delivery unit (20.d1), the inventories in transit to the downstream delivery units (20.3, ...) and the inventories in an input buffer (50.e) of the downstream delivery unit (20.e) are determined and added up.

5. The method as recited in one of Claims 1 through 4,
wherein in determining the quantity of the upstream product (V) needed by the end user (30), the quantity of at least one intermediate product (Z) for the manufacture of which the upstream product (V) is used and which is delivered by another delivery unit (20.e, 20.f, ...) of the manufacturing network (10) directly to the end user (30) is determined,
and a parts list including the intermediate product (Z) and the upstream product (V) is used.

6. The method as recited in one of Claims 1 through 5,
wherein
– the multiple points in time for the setpoint delivery curve (110, 200) are multiple successive days from a first period of time that has been defined,
– the multiple points in time for the inventory curve (110, 200) are multiple successive days from the first or a second period of time that has been defined,
– and both periods of time are each at least five times as long as the maximum period of time between the occurrence and elimination of a delivery restriction at the delivery unit (20.d1) manufacturing the upstream product (V).

7. The method as recited in one of Claims 1 through 6,
wherein the quantity of the upstream product (V) required by the end user (30) is determined and

is stored in the form of an end user demand curve (1110) for the upstream product (V),
an actual lead time (VLZ_actual) for the upstream product is determined,
and the setpoint delivery curve (110, 200) is determined by shifting the end user demand curve (1110) along the time axis by the actual lead time (VLZ_actual).

8. The method as recited in Claim 7,
wherein the quantity of an intermediate product (Z) required by the end user (30), for the manufacture of which the upstream product (V) is used, is determined and is stored in the form of an end user demand curve (1100) for the intermediate product (Z),
using a parts list, the number of units of the upstream product (V) needed for the manufacture of one unit of an intermediate product (Z) is determined,
and the end user demand curve (1110) for the upstream product is determined with the help of the end user demand curve (1100) for the intermediate product and with the help of the parts list.

9. The method as recited in one of Claims 1 through 8,
wherein
– the upstream product is fabricated in lots, each including a multiple of a basic quantity,
– for each possible period of time, the effects of lot fabrication are calculated out of the simulated inventory curve in calculating a simulated inventory curve (130, 140, 150, 160) and a corrected simulated inventory curve (230) is calculated thereby,
– and the optimization criterion (σ) is based on the corrected simulated inventory curve (230).

10. The method as recited in Claim 9,
wherein in extrapolating the effects of lot fabrication
the points in time (LFZ [1], LFZ [2], ...) at which a lot has been completed are determined by analyzing the simulated inventory curve (130, 140, 150, 160),
and for a point in time between two lot completion points in time (LFZ [1], LFZ [2], ...), the values of the setpoint delivery curve (110, 200) for all subsequent points in time until the last point in time before the next lot completion point in time are subtracted from the value of the simulated inventory curve (220).

11. The device for performing the method as recited in one of Claims 1 through 10 having an apparatus for determining and storing the setpoint delivery curve (110, 200)
wherein
the device includes
– an apparatus for determining and storing the inventory curve (100),
– an apparatus for determining simulated inventory curves (130, 130.1, 140, 150, 160) for various possible periods of time (ΔVLZ),
– and an apparatus for determining the correction period of time (ΔVLZ_opt) by selection of the optimum period of time (ΔVLZ_opt) according to an optimization criterion (σ) based on the simulated inventory curves (130, 130.1, 140, 150, 160) from the quantity of possible periods of time (ΔVLZ).

12. A computer program product which is directly loadable into the internal memory of a computer and includes software sections with which a method as claimed in one of Claims 1 through 10 is executable when the product is running on a computer.

13. A computer program product which is stored on a computer-readable medium and has computer-readable program means which cause the computer to execute a method as recited in one of Claims 1 through 10.